

Somnologie 2024 · 28:43–48
<https://doi.org/10.1007/s11818-024-00446-7>
Accepted: 6 January 2024
Published online: 28 February 2024
© The Author(s) 2024



Adolescent sleep and mental health in times of COVID-19

Maren-Jo Kater · Anika Werner · Arnold Lohaus

Faculty of Psychology and Sports Science, Developmental Psychology and Developmental Psychopathology, Bielefeld University, Bielefeld, Germany

Abstract

Background: The COVID-19 pandemic caused major changes in public and private life, especially for adolescents. As a result, the mental health and sleep of many adolescents were significantly impaired, although some adolescents report also positive sleep changes.

Objective: The present study investigates how adolescents with positive subjective COVID-19-related sleep changes (CSC), without CSC, or with negative CSC differ in terms of their sleep parameters, resources, and mental health profiles.

Methods: Self-reports of 92 German adolescents (mean age 14.43 ± 1.69 years; 54% female) on mental health were collected before pandemic onset (T1; July 2019–March 2020) and during the pandemic (T2; June 2020–February 2021).

Results: A profile analysis indicated different profile patterns for adolescents with positive, negative, and no CSC, revealing decreased sleep onset latency, pre-sleep arousal, and stress experiences, and higher quality of life, sleep-related self-efficacy, and personal resources in adolescents with subjective positive CSC. However, no differences between T1 and T2 were found for mental health parameters, indicating that higher levels partly existed even before the pandemic.

Conclusion: Subjectively evaluated sleep improvements occur in conjunction with better mental health and personal resources, underscoring the need for holistic prevention. Accordingly, personal and sleep-specific resources should be strengthened in a targeted manner.

Keywords

COVID-19 pandemic · Sleep disturbances · Personal and social resources · Sleep-related self-efficacy · Health-related quality of life

Theoretical background



Scan QR code & read article online

The onset of the COVID-19 pandemic triggered multiple restrictions at a structural level and personal level (e.g., school closures, contact restrictions). For many children and adolescents this period was characterized by increased homeschooling and isolation, resulting in symptoms such as anxiety and depression [1]. Thus, about two thirds of adolescents felt distressed by the extraordinary situation of the pandemic [2]. Several studies showed associations between mental health and sleep in times of COVID-19 among youths. A meta-analysis by Sharma et al. [3] focused on sleep during the COVID-19 restrictions and emphasized that a large proportion of children and adolescents did not follow recommendations regarding sleep duration and

delayed individual bedtimes. The authors also pointed out an alarmingly high prevalence of sleep disturbances during the pandemic. Although negative changes of mental health seem to predominate, some adolescents report positive changes related to pandemic circumstances. A study by Socarras et al. [4] showed sleep improvement for many adolescents in terms of longer sleep duration, better sleep quality, and decreased daytime sleepiness, especially on weekdays.

Individual resources appear to play a distinctive role in coping within the pandemic. Jiang et al. [5] showed that resilience, defined as the ability to endure adversity, acted as a protective factor for depressive symptoms and sleep

disturbances in adolescents before and during the pandemic. Their definition of resilience includes positive thinking in a crisis situation, in addition to family support. In an adult sample, personal resources such as positive affect and self-care behavior also predicted subjective sleep quality as well as more positive retrospective changes in sleep [6].

The present study investigates whether adolescents with negative and positive COVID-19-related sleep changes and without CSC differ in terms of their mental health profiles (sleep, stress, emotional and behavioral problems, quality of life, and resources). CSC refers to the subjective extent to which adolescents have noticed a change in their sleep since the onset of the pandemic. First, it is expected that adolescents with positive CSC during the pandemic have more functional profiles in terms of mental health facets than adolescents without CSC, and particularly compared to adolescents with negative CSC. Second, these three groups will be examined with respect to possible group-dependent changes in mental health facets before and during the pandemic.

Methods

Sample and procedure

Data collection was conducted as part of a longitudinal research project at Bielefeld University involving both adolescents with and without sleep disturbances. First, either a 2-week sleep diary or an online questionnaire battery was completed at home in randomized order. Next, a sleep interview was conducted at the university, and further questionnaires were filled out. The data collection procedure was similar for both measurement timepoints, with approximately 9 months in between (standard deviation [SD] = 1.8). Data for the first timepoint (T1) were collected before the start of the COVID-19 pandemic and the first lockdown in Germany from July 2019 (week 29) to the beginning of March 2020 (week 10). The second timepoint (T2) followed from mid-June 2020 (week 25) to the end of February 2021 (week 8). The resulting sample aged 11 to 17 years ($N = 92$; mean [M] = 14.43; SD = 1.69; 54% female) attended the 5th to 12th grade of a Gym-

nasium (46%), a secondary school (53%), or a vocational school (1%). The subjects were rewarded with € 30 vouchers for each timepoint. The study was approved by the university ethics committee, and participants and their caregivers gave informed consent.

Instruments

Sleep disturbances were assessed by the Sleep Disturbance Scale for Children (SDSC [7]; $\alpha = 0.83$). In addition, the presence of an insomnia diagnosis was determined with a sleep interview based on the criteria of the International Classification of Sleep Disorders [8]. Average total sleep time, sleep onset latency (SOL), sleep quality, and sleep efficiency were captured via a 2-week sleep diary. Evening pre-sleep arousal was assessed using the Pre-Sleep Arousal Scale ($\alpha = 0.91$) [9], and daytime sleepiness by the Epworth Sleepiness Scale ($\alpha = 0.78$) [10]. The sleep parameters were collected at both T1 and T2. At T2 only, the perceived COVID-19-related sleep change (CSC) was assessed by asking whether sleep had changed since the beginning of the COVID-19 pandemic. The item "I have sleep disturbances (e.g., falling asleep or sleeping through the night, nightmares)" was answered on a five-point Likert scale ranging from *much less* (-2) to *unchanged* (0) to *much more* (2). Based on the responses, three groups were distinguished: adolescents with subjectively positive CSC (responses of -2 or -1), adolescents without CSC (responses of 0), and those with negative CSC (responses of 1 or 2). The level of stress experience was assessed using the Adolescent Stress Questionnaire—Short version ($\alpha = 0.91$) [11]. COVID-19-related distress was measured at T2 via the item "The current corona situation causes feelings of uncertainty or anxiety in many people. How much do you feel stressed by the current situation?" The response options varied on a five-point Likert scale ranging from *not at all* (0) to *very much* (4). Internalizing/externalizing symptoms and health-related quality of life (HQoL) were measured by the Youth Self Report ($\alpha_{\text{internalizing}} =$

0.91; $\alpha_{\text{externalizing}} = 0.84$) [12] and the Questionnaire for the Assessment of Health-Related Quality of Life in Children and Adolescents (KINDL; $\alpha = 0.86$) [13]. Social ($\alpha = 0.91$) and personal resources ($\alpha = 0.88$) were assessed by the Questionnaire on Resources in Childhood and Adolescence [14]. The sleep-related self-efficacy scale measured one's own coping skills for potential sleep disturbances (adapted from Kanis [15]; 10 items, response scale: *I can't manage that at all* (0) to *I am completely sure that I will be able to manage it* (100), $\alpha = 0.91$).

Statistical analysis

Missing values (2%) were imputed using MICE in R with variables utilized correlating ≤ 0.10 (R: a language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria). The 10 resulting multiple datasets were aggregated, and total scores were calculated.

To address the first research question, a profile analysis was conducted by CSC group to test for profile differences at T2. The profile analysis was calculated using profileR. In case of significant profile deviations, these were subsequently explored using multivariate analysis of variance (MANOVA) and post-hoc ANOVAs with pairwise comparisons. The dichotomous variables sex and insomnia were examined for group differences using χ^2 tests.

Regarding the second research question, a time (2) \times group (3) MANCOVA with repeated measures and post-hoc ANCOVAs and pairwise comparisons were calculated, with age and sex as covariates. Partial η^2 indicates a small (> 0.01), medium (> 0.06), and large effect (> 0.14), respectively.

Results

Regarding CSC, 18 adolescents were assigned to the group with a positive CSC (nine with slight and nine with strong improvements in sleep). At T2, 61% of them had clinically relevant sleep disturbances (SDSC sum score ≥ 39 [9]). For 62 adolescents, sleep had remained unchanged since the onset of the pandemic (no CSC), of whom 69% had clinically relevant sleep disturbances at T2. Twelve adolescents reported a negative CSC, with all adolescents

¹ All internal consistencies refer to T2.

Table 1 Means (M), standard deviations (SD) and comparisons for the three groups during COVID-19							
	1. Positive CSC ^a	2. No CSC ^b	3. Negative CSC ^c	ANOVA		Contrast 1 (1 + 2) vs. 3	Contrast 2 1 vs. 3
	M (SD)	M (SD)	M (SD)	F	η^2	F	F
Age	14.39 (1.34)	15.29 (1.68)	16.58 (0.90)	7.28**	0.13	4.76	9.80**
Sex ^d	9 boys; 9 girls	31 boys; 32 girls	2 boys; 10 girls	4.67	0.10	3.29	2.16
<i>Sleep-related variables</i>							
Sleep disturbances	42.33 (9.58)	44.08 (9.11)	56.75 (11.76)	9.97***	0.18	0.47	19.50***
Insomnia ^d	13 without; 5 with	45 without; 17 with	5 without; 7 with	4.60	0.22	3.03	1.67
Pre-sleep arousal	23.06 (6.92)	25.68 (10.99)	38.00 (11.47)	8.48***	0.16	0.89	16.07***
Daytime sleepiness	11.78 (3.32)	12.73 (3.70)	15.00 (3.69)	2.93	0.06	0.95	4.91*
Sleep quality	2.38 (0.63)	2.50 (0.59)	2.89 (0.42)	3.03	0.06	0.53	5.53*
Sleep onset latency	23.45 (16.21)	21.69 (12.81)	33.50 (22.14)	3.14*	0.08	0.19	6.09*
Sleep duration	469.48 (47.55)	469.84 (69.46)	440.70 (68.78)	1.02	0.01	0.00	2.07
Sleep efficiency	84.98 (9.44)	86.95 (8.87)	80.62 (7.59)	2.66	0.05	0.70	4.62*
<i>Stress-related variables</i>							
Stress level	44.39 (13.17)	52.92 (17.07)	62.92 (16.63)	4.47*	0.09	3.46	5.48*
COVID-19 related distress	1.67 (0.91)	2.45 (1.00)	2.58 (0.79)	5.19**	0.11	8.60**	1.00
<i>Mental health</i>							
Internalizing symptoms	13.89 (10.11)	13.65 (10.10)	19.42 (9.63)	1.69	0.05	0.01	3.38
Externalizing symptoms	8.77 (6.23)	8.51 (5.90)	10.42 (5.92)	0.52	0.02	0.03	1.00
Health-related quality of life	90.44 (12.51)	85.95 (12.26)	78.50 (10.66)	3.50*	0.07	1.97	5.07*
<i>Resources</i>							
Social resources	75.22 (15.57)	72.47 (10.89)	69.00 (10.52)	0.99	0.02	0.75	1.23
Personal resources	108.94 (12.82)	100.68 (10.63)	97.00 (12.57)	4.96**	0.09	7.43**	2.49
Sleep-related self-efficacy	824.12 (191.64)	848.16 (184.08)	668.17 (235.73)	4.39*	0.09	0.22	8.57**
CSC COVID-19-related sleep changes							
^a n = 18							
^b n = 62							
^c n = 12							
^d χ^2 test for dichotomous variables							
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$							

in this group reporting mild worsening of sleep and 92% within the range of relevant sleep disturbances at T2.

Differences in mental health profiles during the COVID-19 pandemic (T2)

The profile analysis by group (positive/no/negative CSC) of health-related parameters (sleep indicators, stress, psychopathology, HQoL, resource-related parameters, age, and sex) showed group depending profile patterns, e.g. they differed their mental health profiles, interaction group \times mental health parameters, $F(34, 148) = 2.08$, $p = 0.001$, Pillai trace = 0.65. This finding was examined in more detail using MANOVA and ANOVAs with contrasts. The MANOVA indicted a main group effect, $F(32, 150) = 2.10$, $p < 0.01$, Pillai trace = 0.62, partial

$\eta^2 = 0.31$, revealing significant differences for age, sleep disturbances, SOL, pre-sleep arousal, stress experiences, COVID-19-related distress, HQoL, personal resources, and sleep-related self-efficacy (all $p < 0.05$; **Table 1**). Adolescents with positive compared to negative CSC differed regarding the abovementioned parameters (except SOL and sleep-related self-efficacy). Adolescents with positive compared to without CSC had lower COVID-19-related distress and higher personal resources (both $p < 0.05$).

Differences in mental health before (T1) compared to during (T2) the COVID-19 pandemic

The time (T1/T2) \times group (positive/no/negative CSC) MANCOVA with repeated

measures revealed neither a significant main effect of time, $F(14, 74) = 1.55$, $p = 0.11$, Pillai trace = 0.23, partial $\eta^2 = 0.23$, nor an interaction effect of time \times group, $F(28, 150) = 0.82$, $p = 0.73$, Pillai trace = 0.27, partial $\eta^2 = 0.13$. Consequently, there was neither a time effect nor a group-specific difference between the two measurement timepoints before the pandemic onset (T1) and after the first wave (T2) in terms of the mental health parameters studied in this sample. However, a significant group effect, $F(28, 150) = 1.68$, $p = 0.03$, Pillai trace = 0.48, partial $\eta^2 = 0.24$, supports the above finding that adolescents with positive and/or without CSC showed more functional scores on mental health at both T1 and T2. The post-hoc ANOVAs again showed group differences for stress experiences, sleep

disturbances, sleep onset latency, pre-sleep arousal, sleep-related self-efficacy, and personal resources (all $p < 0.05$), but not for HQoL.

Discussion

Several studies have highlighted an increasing prevalence of insomnia and mental health problems since the COVID-19 pandemic [2, 16]. Others found sleep improvements (e.g., increased sleep duration [4]). This study is specifically interested in the mental health profiles of adolescents with a perceived improvement or no change in sleep parameters since the onset of the pandemic to identify associated resources and relevant entry points for future prevention efforts. The results revealed a perceived positive change or no change in sleep to be associated with better overall sleep, lower stress, higher sleep-related self-efficacy, and higher perceived HQoL. Compared to adolescents without CSC, adolescents with positive CSC are characterized by more pronounced personal resources and less experienced COVID-19-related distress. It should be noted, however, that these results are partly due to group differences that already existed before the pandemic (as is shown by the longitudinal analysis).

Regarding sleep, as expected, shorter SOL, lower pre-sleep arousal, and fewer sleep disturbances overall were present among adolescents with positive CSC and/or without CSC. Surprisingly, significant differences in daytime sleepiness were not found. The flexibility provided by online class schedules could possibly provide compensation also for adolescents with negative CSC due to individually adjusted sleep times and durations and the opportunity to rest more frequently [17].

In line with other findings [18], adolescents with positive CSC/without CSC showed lower stress experiences as well as specifically lower COVID-19-related distress and higher HQoL. However, in contrast to the findings of Rosen et al. [19], where sufficient sleep in adolescents was associated with less psychopathology during the pandemic, this study found no difference in internalizing and externalizing symptoms. In our sample, 61% of the

adolescents with a positive sleep change still reported relevant amounts of sleep disturbances and might therefore still suffer from internalizing/externalizing symptoms, which could explain these findings.

Most importantly, personal resources such as optimism and self-esteem were found to be higher in adolescents with positive CSC compared to adolescents with negative CSC or without CSC. It can therefore be assumed that either personal resources have suffered from subjectively poorer sleep and related difficulties since the pandemic or, conversely, that more pronounced personal resources play a protective role in the context of sleep disturbances. An association between personal resources and sleep in children and adolescents outside a pandemic situation has also been confirmed in several previous studies [20, 21]. As possible mechanisms for this link, Sadeghi-Bahmani and Brand [22] hypothesize that higher (psychological) resilience is associated with more efficient coping strategies as well as better emotion-regulation skills, which, in turn, might facilitate sleep.

It is interesting to note that sleep-related self-efficacy was highest in the group without CSC and not, as expected, in the group with positive CSC. It is conceivable that adolescents with positive CSC might attribute their improved sleep to external circumstances (such as online classes at home or more flexible daily structure) rather than to their own competence (self-efficacy).

Although the present study showed that various aspects of mental health are intertwined with positive CSC, the subsequent longitudinal analysis revealed that their extent did not differ before (T1) and during (T2) the pandemic (regardless of the group). Thus, adolescents who stated that they had slept better since the pandemic seem to have already been less burdened before the pandemic than those who reported negative CSC. Consequently, adolescents who were already less burdened before the pandemic thus seem to suffer less from sleep-related pandemic impacts. A similar assumption is made by Bujard et al. [23], who assume that a good mental and physical condition before the pandemic reduces the risk of developing depressive symptoms during the pandemic.

Limitations

Although the inclusion of cross-sectional and longitudinal data is a particular strength of this study, the findings should be interpreted in light of some limitations: 1) the sample size, particularly in connection with the unbalanced group sizes, is relatively small for the analyses, although post-hoc power analyses showed satisfactory power for all calculations performed; 2) the time interval from June 2020 to February 2021 includes different phases of the COVID-19 pandemic (e.g., a relaxation phase in late summer 2020 and a rise of incidences in autumn/winter 2020/21), which may affect interpretation of the results; 3) the assessment of CSC as a single-item indicator allows for limited reliable capture of the construct and of various facets of sleep, although a retrospective estimation can be an appropriate estimation method for indicating the perceived intensity [24]; 4) other relevant behaviors (e.g., exercise, media consumption) or traumatizing experiences (e.g., experiences of violence, illness, or death from COVID-19 within the family) should be considered in future studies within the framework of a multifactorial model of sleep and mental health.

Conclusion

In conclusion, the present study particularly emphasizes the relevance of strengthening personal resources (e.g., optimism) and sleep-related self-efficacy expectations in the context of sleep parameters, especially during times of crisis. Thus, the findings suggest a resource-oriented view of sleep disturbances and related domains of stress and HQoL as potentially helpful in clinical practice for prevention and intervention—both after a pandemic and to equip for possible future challenges.

Corresponding address

Maren-Jo Kater

Faculty of Psychology and Sports Science, Developmental Psychology and Developmental Psychopathology, Bielefeld University
Bielefeld, Germany
maren-jo.kater@uni-bielefeld.de

Funding. Open Access funding enabled and organized by Projekt DEAL.

Declarations

Conflict of interest. M.-J. Kater, A. Werner and A. Lohaus declare that they have no competing interests.

All procedures performed in studies involving human participants or on human tissue were in accordance with the ethical standards of the institutional and/or national research committee and with the 1975 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

Open Access. This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Panchal U, Salazar de Pablo G, Franco M, Moreno C, Parellada M, Arango C, Fusar-Poli P (2023) The impact of COVID-19 lockdown on child and adolescent mental health: systematic review. *Eur Child Adolesc Psychiatry* 32:1151–1177
- Ravens-Sieberer U, Kaman A, Otto C et al (2021) Seelische Gesundheit und psychische Belastungen von Kindern und Jugendlichen in der ersten Welle der COVID-19-Pandemie – Ergebnisse der COPSYS-Studie. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz* 64:1512–1521
- Sharma M, Aggarwal S, Madaan P, Saini L, Bhutani M (2021) Impact of COVID-19 pandemic on sleep in children and adolescents: a systematic review and meta-analysis. *Sleep Med* 84:259–267
- Socaras LR, Potvin J, Forest G (2021) COVID-19 and sleep patterns in adolescents and young adults. *Sleep Med* 83:26–33
- Jiang H, Yu W, Lin D, Macnamara BN (2021) Resilience of adolescents, though weakened during pandemic-related quarantine, serves as a protective process against depression and sleep disturbances. *Psychol Health Med* 27(9):1977–1988
- Werner A, Kater MJ, Schlarb AA, Lohaus A (2021) Sleep and stress in times of the covid-19 pandemic: the role of personal resources. *Appl Psychol Health Well Being* 13(4):935–951
- Döpfner M, Plück J, Kinnen C, Working group German Child Behavior Checklist (2014) CBCL Handbuch-Schulalter. Manual zum Elternfragebogen über das Verhalten von Kindern und Jugendlichen, (CBCL/6-18R), zum Lehrerfragebogen über das Verhalten von Kindern und Jugendlichen (TRF/6-18R) und zum Fragebogen für Jugendliche (YSR/11-18R). Hogrefe
- Lohaus A, Nussbeck FW (2016) Fragebogen zu Ressourcen im Kindes- und Jugendalter (FRKJ 8–16). Hogrefe
- Bruni O, Ottaviano S, Guidetti V, Romoli M, Innocenzi M, Cortesi F, Giannotti F (1996) The Sleep Disturbance Scale for Children (SDSC) construction and validation of an instrument to evaluate sleep disturbances in childhood and adolescence. *J Sleep Res* 5:251–261
- American Academy of Sleep Medicine (2014) The International Classification of Sleep Disorders, 3rd edn.
- Gieselmann A, de Jong-Meyer R, Pietrowsky R (2014) PSAS. Pre-Sleep Arousal Scale – deutsche Fassung, Leibniz-Zentrum für Psychologische Information und Dokumentation (ZPID) (Ed.) edn. Elektronisches Testarchiv
- Janssen KC, Phillipson S, O'Connor J, Johns MW (2017) Validation of the Epworth sleepiness scale for children and adolescents using rasch analysis. *Sleep Med* 33:30–35
- Anniko MK, Boersmal K, Van Wijk N, Byrne D, Tillfors M (2018) Development of a shortened version of the Adolescent Stress Questionnaire (ASQ-S): construct validity and sex invariance in a large sample of Swedish adolescents. *J Child Psychol Psychiatry* 6:4–15
- Ravens-Sieberer U, Bullinger M (1998) News from the KINDL-questionnaire—a new version for adolescents. *Qual Life Res* 7:653
- Kanis JB (2016) Elterliches Wissen, Selbsthilfe und psychotherapeutische Intervention bei nicht-organischen Schlafstörungen im Kleinkindalter. https://opus.bibliothek.uni-wuerzburg.de/opus4-wuerzburg/frontdoor/deliver/index/docId/13343/file/Kanis_Julia_Schlafstoerungen.pdf
- Zhou SJ, Wang L-L, Yang R et al (2020) Sleep disturbances among Chinese adolescents and young adults during the coronavirus-2019 pandemic. *Sleep Med* 74:39–47
- Stone JE, Phillips AJ, Chachos E et al (2021) In-person vs home schooling during the COVID-19 pandemic: differences in sleep, circadian timing, and mood in early adolescence. *J Pineal Res* 71(2):e12757
- Chouchou F, Augustini M, Caderby T, Caron N, Turpin NA, Dalleau G (2021) The importance of sleep and physical activity on well-being during COVID-19 lockdown: reunion island as a case study. *Sleep Med* 77:297–301
- Rosen ML, Rodman AM, Kasperek SW, Mayes M, Freeman MM, Lengua LJ, Meltzoff AN, McLaugh-

Schlaf und psychische Gesundheit von Jugendlichen in Zeiten von COVID-19

Hintergrund: Infolge der COVID-19-Pandemie verschlechterte sich sowohl die psychische Gesundheit als auch der Schlaf von vielen Jugendlichen erheblich, während einige jedoch auch über einen verbesserten Schlaf berichteten.

Ziel: In der vorliegenden Studie wurde untersucht, inwieweit sich Jugendliche mit positiven COVID-19-bezogenen Schlafveränderungen (CSC), ohne CSC und mit negativen CSC in ihrem psychischen Gesundheitsprofil, ihrem Schlaf und ihren Ressourcen unterscheiden.

Methoden: Selbsteinschätzungen von 92 Jugendlichen zur psychischen Gesundheit wurden vor dem Beginn der Pandemie (T1; Juli 2019 – März 2020) und während der Pandemie (T2; Juni 2020 – Februar 2021) erhoben.

Ergebnisse: Eine Profilanalyse zeigte unterschiedliche Profilmuster für Jugendliche mit positiven, negativen und ohne CSC. Jugendliche mit positiven CSC weisen eine geringere Einschlaf latenz, Erregung vor dem Schlafengehen („pre-sleep arousal“) und Stresserleben sowie eine höhere gesundheitsbezogene Lebensqualität, schlafbezogene Selbstwirksamkeit und persönliche Ressourcen auf. Es wurden jedoch keine Unterschiede in den Parametern der psychischen Gesundheit zwischen T1 und T2 festgestellt, was darauf hindeutet, dass die Gruppenunterschiede teilweise bereits vor der Pandemie bestanden.

Schlussfolgerung: Ein subjektiv besserer Schlaf ist mit einer besseren psychischen Gesundheit verbunden, was die Notwendigkeit einer ganzheitlichen Prävention unterstreicht. Persönliche und schlafspezifische Ressourcen sollten folglich zielgerichtet gestärkt werden.

Schlüsselwörter

COVID-19-Pandemie · Schlafstörungen · Persönliche und soziale Ressourcen · Schlafbezogene Selbstwirksamkeit · Gesundheitsbezogene Lebensqualität

lin KA (2021) Promoting youth mental health during the COVID-19 pandemic: a longitudinal study. PLoS ONE. <https://doi.org/10.1371/journal.pone.0255294>

20. Lemola S, Räikkönen K, Scheier MF, Matthews KA, Pesonen AK, Heinonen K, Lahti J, Komsu N, Paavonen JE, Kajantie E (2011) Sleep quantity, quality and optimism in children. J Sleep Res 20:12–20

21. Werner A, Kater MJ, Kerckhoff D, Schlarb AA, Lohaus A (2022) Personal and social resources in the context of adolescent sleep. Psychol Health. <https://doi.org/10.1080/08870446.2022.2121396>

22. Sadeghi-Bahmani D, Brand S (2022) Sleep medicine reviews “stay hungry, stay foolish, stay tough and sleep well”; why resilience and mental toughness and restoring sleep are associated. Sleep Med Rev 62:101618

23. Bujard M, von den Driesch E, Ruckdeschel K, Laß I, Thönnissen C, Schumann A, Schneider NF (2021) Belastungen von Kindern, Jugendlichen und Eltern in der Corona-Pandemie. Bundesinstitut für Bevölkerungsforschung

24. Achenbach TM, Dumenci L, Rescorla LA (2002) Ten-year comparisons of problems and competencies for national samples of youth: self, parent, and teacher reports. J Emot Behav Disord 10:194–203

Publisher's Note. Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Inklusion in der Schlafmedizin

Barrierefreiheit für blinde und sehbehinderte Menschen sowie Menschen mit Leseschwäche

Menschen mit Behinderungen sind besonderen Schwierigkeiten ausgesetzt, wenn sie sich über gesundheitliche Fragen z.B. den Schlafstörungen eigenständig informieren wollen.

Nach einer Idee von Nina Schweppe einer von NON 24 Betroffenen, hat die Niedersächsische Selbsthilfeorganisation „Arbeitskreis Schlafapnoe Niedersächsischer Selbsthilfegruppen“ mit Unterstützung der AOK, Aktion Mensch sowie der Deutschen Gesellschaft für Schlafforschung und Schlafmedizin barrierefreie Informationen als PDF und Hörbuch für Patienten mit Schlafstörungen erstellt.

Wir möchten für Patienten, die blind, sehbehindert oder von Beeinträchtigungen der Lesefähigkeit betroffen sind, einen barrierefreien Zugang zu Informationen über die Schlafstörungen schaffen. So können diese Patienten selbstwirksam alles tun, um sich über Ursache und Therapie von Schlafstörungen zu informieren.

Dem ZweiSinnePrinzip folgend, stehen die Informationen als barrierefreies PDF und als Hörbuch im DaisyFormat als CD und als Download zur Verfügung.

Mit diesem Inklusionsprojekt schaffen wir nicht nur die Möglichkeit für Menschen mit Seh- und Leseschwierigkeiten, die Patientenratgeber zur Verbesserung ihrer gesundheitlichen Situation zu nutzen, sondern wir bieten auch einen Mehrwert für alle Menschen, die lieber hören statt zu lesen. Im ersten Schritt wurde das Nachschlagewerk „Schlafapnoe Fragen und Antworten zur Therapie“ sowie die Patientenratgeber der DGSM „Ein- und Durchschlafstörungen“ und „Obstruktive Schlafapnoe“ zum Download zur Verfügung gestellt. Weitere Patientenratgeber der Deutschen Gesellschaft für Schlafmedizin und Schlafforschung werden z.Z. barrierefrei als Hörbuch und barrierefreies PDF erstellt.

Das Nachschlagewerk kann als PDF sowie das Hörbuch von unserer Homepage heruntergeladen werden.

Zusätzlich stehen PDF und Hörbuch für Blinde als DAISY-CD zur Verfügung. Die CD's dürfen kopiert und weitergeleitet werden.

Die DAISY-CD kann von Blinden kostenlos angefordert werden. Zum Erstellen (brennen) einer DAISY-CD des Ratgebers kann ein ISO-Abbild unter der E-Mail-Adresse: asn.selbsthilfegruppen@gmail.com anfordert werden.

Reinhard Wagner
Arbeitskreis Schlafapnoe Niedersächsischer Selbsthilfegruppen e.V.
0176 555 93 652



QR-Code zur Internetseite zum Herunterladen